



Launch Mission Execution Forecast

Mission: Delta IV Heavy L-44

Issued: 24 Sep 2020 / 0800L (1200Z)

Valid: 26 Sep 2020 / DURING WINDOW



Forecast Discussion: Developing southeast flow will bring increasing moisture and humidity today, but precipitation chances remain low. A surge of deep moisture will be drawn over the area tomorrow as the remnants of Beta move into the Southeast US. For MST Roll in the afternoon, scattered showers and isolated thunderstorms are forecast with surface winds out of the southeast between 10 to 15 knots. While most of the precipitation is expected to diminish in the evening, lingering cloud cover from earlier showers and thunderstorms will bring the chance of a Thick Cloud Layer and/or Debris Clouds Rule violation during the launch window early Saturday morning. Ample low-level moisture will linger through the weekend; however, a building mid-level ridge will advect drier air aloft. This, combined with weak steering winds, should reduce afternoon shower and storm coverage near the immediate coast both Saturday and Sunday afternoon. As a result, the chances of weather-related violations decrease in the event of a 24- or 48-hour delay.

Launch Day	Probability of Violating Weather Constraints					
	40%	Primary Concerns: Thick Cloud Layer Rule, Debris Clouds Rule				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility:	Isolated Showers / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)
24-Hour Delay	Temp/Humidity:	80°F / 87%	Cumulus	Scattered	2,500	10,000
	Ground Winds (230'):	190° @ 9 - 14 knots	Altostratus	Broken	12,000	16,000
						Solar Activity: Low
24-Hour Delay	Probability of Violating Weather Constraints					
	20%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)
48-Hour Delay	Temp/Humidity:	78°F / 89%	Cumulus	Scattered	2,500	8,000
	Ground Winds (230'):	VRB @ 4 - 9 knots	Altocumulus	Scattered	12,000	16,000
						Solar Activity: Low
48-Hour Delay	Probability of Violating Weather Constraints					
	20%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)
	Temp/Humidity:	79°F / 88%	Cumulus	Scattered	2,500	8,000
	Ground Winds (230'):	150° @ 6 - 11 knots	Altocumulus	Scattered	12,000	16,000
						Solar Activity: Low

Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear and solar activity.

Next Forecast Will Be Issued	25 Sep 2020
------------------------------	-------------